

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended). A semiconductor integrated circuit which has a non-contact IC card function and a wireless reader/writer function for non-contact IC card ~~and to which a first antenna is connected to carry out communication with a non-contact IC card or a wireless reader/writer for non-contact IC card each placed in the vicinity of the semiconductor integrated circuit~~ comprising:

demodulation means for demodulating a first received signal transmitted from ~~[[the]]~~ an external wireless reader/writer and received through ~~[[the]]~~ a first antenna or a second received signal transmitted from ~~[[the]]~~ an external non-contact IC card;

full-wave rectification and smoothing means for subjecting the first received signal to full-wave rectification and smoothing;

first transmission means for transmitting a first transmission signal to the external wireless reader/writer through the first antenna while the semiconductor integrated circuit is in an non-contact IC card mode of operation; and

second transmission means for transmitting a second transmission signal to the external non-contact IC card through the first antenna while the semiconductor inetgrated circuit is in a wireless reader/writer mode of operation.

Claim 2 (Original). A semiconductor integrated circuit according to claim 1, further comprising stabilization means for stabilizing the power obtained from the first received signal subjected to the full-wave rectification and smoothing by the full-wave rectification and smoothing means.

Claim 3 (Currently Amended). A semiconductor integrated circuit according to claim 1, wherein the first transmission means is connected behind the full-wave rectification and smoothing means as well as transmits the first transmission signal by changing ~~[[the]]~~ a load of a second antenna of the external wireless reader/writer electromagnetically coupled with the first antenna.

Claim 4 (Original). A semiconductor integrated circuit according to claim 1, wherein an end of the second transmission means is connected to an end of the first antenna, and the other end of the second transmission means is connected to an intermediate tap of the first antenna.

Claim 5 (Currently Amended). A semiconductor integrated circuit according to claim 1, wherein the second transmission means transmits the second transmission signal that is a differential signal created based on a transmission carrier signal having a predetermined frequency and data to be transmitted to the external non-contact IC card.

Claim 6 (Currently Amended). A semiconductor integrated circuit according to claim 1, wherein the demodulation means demodulates the first received signal as ~~[[the]]~~ a differential signal or the second received signal as the differential signal.

Claim 7 (Currently Amended). A wireless communication apparatus which has a non-contact IC card function and a wireless reader/writer function for non-contact IC card ~~and carries out communication with a non-contact IC card or a wireless reader/writer for non-contact IC card each placed in the vicinity of the wireless communication apparatus~~ comprising:

an antenna for carrying out communication with ~~[[the]]~~ an external non-contact IC card ~~or the~~ and an external wireless reader/writer;

demodulation means for demodulating a first received signal transmitted from the external wireless reader/writer and received through the antenna or a second received signal transmitted from the external non-contact IC card and received through the antenna;

full-wave rectification and smoothing means for subjecting the first received signal to full-wave rectification and smoothing;

first transmission means for transmitting a first transmission signal to the external wireless reader/writer through the antenna while the wireless communication apparatus is in an non-contact IC card mode of operation; and

second transmission means for transmitting a second transmission signal to the external non-contact IC card through the antenna while the wireless communication apparatus is in an wireless reader/writer mode of operation.

Claim 8 (New). A wireless communication apparatus which has a non-contact IC card function and a wireless reader/writer function for non-contact IC card comprising:

an antenna configured to carry out communication with an external non-contact IC card and an external wireless reader/writer;

a demodulation unit configured to demodulate for demodulating a first received signal transmitted from the external wireless reader/writer and received through the antenna or a second received signal transmitted from the external non-contact IC card and received through the antenna;

a full-wave rectification and smoothing unit configured to subject the first received signal to full-wave rectification and smoothing;

a first transmission unit configured to transmit a first transmission signal to the external wireless reader/writer through the antenna while the wireless communication apparatus is in an non-contact IC card mode of operation; and

a second transmission unit configured to transmit a second transmission signal to the external non-contact IC card through the antenna while the wireless communication apparatus is in an wireless reader/writer mode of operation.

Claim 9 (New). A semiconductor integrated circuit according to claim 1, further comprising:

a power supply control unit configured to supply power to components of the semiconductor integrated circuit received from the external wireless reader/writer when the semiconductor integrated circuit is in the non-contact IC card mode of operation, and to supply power to components of the semiconductor integrated circuit from an external power source, different from the external wireless reader/writer, while the semiconductor integrated circuit is in the wireless reader/writer mode of operation.

Claim 10 (New). A wireless communication apparatus of claim 7, further comprising:

a battery;

a power supply control unit configured to supply power to components of the wireless communication apparatus received from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation, and to supply power to components of the wireless communication apparatus from the battery while the wireless communication apparatus is in the wireless reader/writer mode of operation.

Claim 11 (New). A wireless communication apparatus of claim 10, wherein the power supply control unit is further configured to provide power to components of the wireless communication apparatus from both the battery and from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation.

Claim 12 (New). A wireless communication apparatus of claim 8, further comprising:  
a battery;

a power supply control unit configured to supply power to components of the wireless communication apparatus received from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation, and to supply power to components of the wireless communication apparatus from the battery while the wireless communication apparatus is in the wireless reader/writer mode of operation.

Claim 13 (New). A wireless communication apparatus of claim 12, wherein the power supply control unit is further configured to provide power to components of the wireless communication apparatus from both the battery and from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation.